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(FILE 'HOME' ENTERED AT 19:52:11 ON 21 MAR 2009)

FILE 'REGISTRY' ENTERED AT 19:52:22 ON 21 MAR 2009 STRUCTURE UPLOADED 0 S L1 16 S L1 FULL

L1 1.2

L3

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Structure attributes must be viewed using STN Express query preparation. 16 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 29 ITERATIONS SEARCH TIME: 00, 00, 01

16 ANSWERS

=> d 1-16 ide can

- 1.3
- RN
- ED
- ANSWER 1 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN 1022178-87-5 REGISTRY Entered STN: 23 May 2008 Propanamide, N-(6-brown-4, 10-dihydro-5, 5-dioxido-10-oxothieno[3,2-CN c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX
- MF C16 H11 Br F3 N 05 S2
- SR STN Files: CA, CAPLUS

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 148:509925

- ANSWER 2 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN
- RN
- ED
- 827629-18-5 REGISTRY
 Entered STN: 09 Feb 2005
 Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)-, mixt. with 5-[(2R)-2-[[2-(2-ethoxyphenoxy)ethyl]amino]propyl]-2methoxybenzenesulfonamide monohydrochloride (9CI) (CA INDEX NAME)
- FS STEREOSEARCH
- MF C20 H28 N2 O5 S , C16 H12 F3 N O5 S2 , C1 H
- CI MXS SR
- STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
 - CM 1
 - CRN 214764-26-8
 - CMF C16 H12 F3 N 05 S2

Absolute stereochemistry. Rotation (+).

- CM 2
- CRN 106463-17-6 (106133-20-4)
- CMF C20 H28 N2 05 S . C1 H

Absolute stereochemistry, Rotation (-),

HC1

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:162637

- ANSWER 3 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN
- RN
- ED
- 827629-17-4 REGISTRY
 Entered STN: 09 Feb 2005
 Benzeneacetic acid, α-cyclohexyl-α-hydroxy-, CN
 - 4-(diethylamino)-2-butynyl ester, hydrochloride, mixt. with (2S)-N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methylpropanamide (9CI) (CA INDEX NAME)
- FS STEREOSEARCH
- MF C22 H31 N O3 , C16 H12 F3 N O5 S2 , C1 H
- MXS SR
- STN Files: CA, CAPLUS, USPATFULL
 - CM 1
 - CRN 214764-26-8
 - CMF C16 H12 F3 N 05 S2

Absolute stereochemistry. Rotation (+).

CM 2

CRN 1508-65-2 (5633-20-5) CMF C22 H31 N 03 . C1 H

$$\begin{array}{c} \text{HO} \quad \text{O} \\ \text{C-C-O-CH}_2\text{-C} \text{=-C-CH}_2\text{-NEt}_2 \\ \text{Ph} \end{array}$$

HC1

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:162623

- 1.3 ANSWER 4 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN
- RN
- ED
- REGISTRY
 Entered STN: 09 Feb 2005
 Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)-, mixt. with 2-[(IR)-3-[bis(1-methylethyl)amino]-1-phenylpropyl]-4-methylphenol (2R, 3R)-2, 3-dihydroxybutanedioate (1:1) (salt) (9CI) (CA INDEX NAME)
- FS STEREOSEARCH
- MF C22 H31 N O , C16 H12 F3 N O5 S2 , C4 H6 O6
- CT MXS SR CA
- STN Files: CA, CAPLUS, USPATFULL
 - CM 1
 - CRN 214764-26-8
 - CMF C16 H12 F3 N 05 S2

Absolute stereochemistry. Rotation (+).

2 CM

CRN 124937-52-6 CMF C22 H31 N O . C4 H6 O6

> CM 3

Absolute stereochemistry.

CRN 124937-51-5

CMF C22 H31 N O

CM

CRN 87-69-4 CMF C4 H6 06

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:162623

- 1.3
- RN
- ED
- ANSWER 5 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN 332029-03-5 REGISTRY Entered STN: 23 Apr 2001
 Propanamide, N-(4,10-dihydro-3-nitro-5,5-dioxido-10-oxothieno[3,2-CN c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX
- MF C16 H11 F3 N2 07 S2
- SR LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:261274

- ANSWER 6 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN 1.3
- RN
- ED
- ASSIGN OF THE ACCIDENT CONTROLL 2009 ACCIDENT AC CN c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)
- MF C16 H11 F3 N2 07 S2
- SR LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:261274

- 1.3 ANSWER 7 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN
- RN
- ED
- ALGORIAN CONTROLL 2009 ACC ON SIN 214764-520 REGISTRY Entered STN: 25 Nov 1998 Propanamide, N-(4, 10-dihydro-3-nitro-5, 5-dioxido-10-oxothieno[3, 2-CN c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)
 - STEREOSEARCH
- C16 H11 F3 N2 07 S2 MF
- SR LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:316211

1.3 ANSWER 8 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN

RN

ED

ARMINA 8 OF THE MATERIAL CONTROLL 2009 ACS ON SIN 214764-51-9 REGISTRY Entered STN: 25 Nov 1998 Propanamich, N-(4, 10-dihydro-2-nitro-5, 5-dioxido-10-oxothieno[3, 2-CN c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

FS STEREOSEARCH

MF C16 H11 F3 N2 07 S2

SR LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:316211

ANSWER 9 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN 1.3

RN

ED

ANSMER 9 0° 10 REGISTRI COPERIORI 2009 ACS ON STN 214764-38-2 REGISTRI ENCOURTE ENCO CN

MF SR CA

STN Files: CA, CAPLUS, USPATFULL LC

$$\begin{array}{c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 148:509925

REFERENCE 2: 134:261274

REFERENCE 3: 129:316211

- ANSWER 10 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN
- RN
- ED
- 244764-36-0 REGISTRY
 Entered STN: 25 Nov 1998
 Propanamic, N-(6-ch)oro-4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-CN c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)
- MF C16 H11 C1 F3 N 05 S2
- SR STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL LC

4 REFERENCES IN FILE CA (1907 TO DATE) 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 148:509925

REFERENCE 2: 137:289043

REFERENCE 3: 134:261274

REFERENCE 4: 129:316211

- ANSWER 11 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN
- RN
- ED
- 24(764-34-8 REGISTRY Service 1998 Propanamic N. V. 1998 Registro 1998 Propanamic N. V. 1998 Propanamic N. V. 1998 Registro 1998 c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)
- MF C17 H14 F3 N 05 S2
- SR CA STN Files: CA, CAPLUS, USPATFULL LC

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:261274 REFERENCE 2: 129:316211

- ANSWER 12 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN
- RN
- ED
- 203 May 200 Ma CN c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX
- MF C17 H14 F3 N 05 S2
- SR STN Files: CA, CAPLUS, USPATFULL LC

3 REFERENCES IN FILE CA (1907 TO DATE) 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 148:509925

REFERENCE 2: 134:261274

REFERENCE 3: 129:316211

- ANSWER 13 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN 1.3
- RN
- ED
- 214764-29-1 REGISTRY Entered STN: 25 Nov 1998 Propanamic, N-(4,10-dihydro-6-methoxy-5,5-dioxido-10-oxothieno[3,2c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX
- MF C17 H14 F3 N 06 S2
- SR STN Files: CA, CAPLUS, USPATFULL LC

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:261274 REFERENCE 2: 129:316211

- ANSWER 14 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN
- RN
- ED
- 214764-27-9 REGISTRY
 Entered STN: 25 Nov 1998
 Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-CN c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2R)- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C16 H12 F3 N 05 S2
- SR
- LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry. Rotation (-).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:261274

REFERENCE 2: 129:316211

- ANSWER 15 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN
- RN
- ED
- 214764-26-8 REGISTRY
 Entered STN: 25 Nov 1998
 Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-CN c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME).
- OTHER NAMES: (S)-5,5-Dioxo-9-[(3,3,3-trifluoro-2-hydroxy-2-methylpropanoyl)amino]-4,10dihydrothieno 3, 2-c [1] benzothiepin-10-one
- KW 7158
- STEREOSEARCH
- MF C16 H12 F3 N 05 S2
- COM SR
- - STN Files: CA, CAPLUS, CASREACT, IMSDRUGNEWS, IMSRESEARCH, PROUSDDR, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry, Rotation (+),

**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT **

20 REFERENCES IN FILE CA (1907 TO DATE) 20 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 148:509925

REFERENCE 2: 144:212756

REFERENCE 3: 143:83428

REFERENCE 4: 142:212362

REFERENCE 5: 142:170135

REFERENCE 6: 142:168588

REFERENCE 7: 142:162637

REFERENCE 8: 142:162623

REFERENCE 9: 142:120499

REFERENCE 10: 141:325736

- ANSWER 16 OF 16 REGISTRY COPYRIGHT 2009 ACS on STN
- RN
- ED
- 214763-95-8 REGISTRY
 Entered STN: 25 Nov 1998
 Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-CN c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)
- MF C16 H12 F3 N 05 S2
- SR STN Files: CA, CAPLUS, CHEMCATS, PROUSDDR, SYNTHLINE, TOXCENTER, LC USPATFULL

6 REFERENCES IN FILE CA (1907 TO DATE) 6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 148:509925

REFERENCE 2: 144:212756

REFERENCE 3: 142:162637

REFERENCE 4: 142:162623

REFERENCE 5: 134:261274

REFERENCE 6: 129:316211

=> fil capl
FILE 'CAPLUS' ENTERED AT 19:54:04 ON 21 MAR 2009
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FILE COVERS 1907 - 21 Mar 2009 VOL 150 ISS 13 FILE LAST UPDATED: 20 Mar 2009 (20090320/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008,

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.
',FIONA' IS DEFALLT FORMAT FOR 'CAPLUS' FILE

=> s 13 L4 20 L3

=> d 1-20 bib abs hitstr

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AN
     2008:529662 CAPLUS
DN
     148:509925
     Therapeutic agents for irritable bowel syndrome
     Yamagata, Tsuyoshi; Shibata, Kenji; Nishiya, Yoichi; Seishi, Takashi;
IN
     Sakuma, Takashi
     Kyowa Hakko Kogyo Co., Ltd., Japan
     PCT lnt. Appl., 68pp.
SO
     CODEN: PIXXD2
DT
LA
     Japanese
FAN. CNT. 1
     PATENT NO.
                          KIND
                                  DATE
                                               APPLICATION NO.
                                                                        DATE
P1
     W0 2008050853
                                  20080502
                                               WO 2007-JP70881
                                                                        20071026
                           A1
         W: AE, AG, AL,
                          AM, AT, AU, AZ,
                                           BA, BB, BG, BH, BR, BW, BY, BZ, CA,
                                           DK, DM, DO, DZ, EC, EE, EG, ES, FI,
             CH, CN, CO, CR, CU, CZ, DE,
              GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
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                                           LK, LR, LS, LT, LU, LY, MA, MD, ME,
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              MG, MK, MN,
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             PT, RO, RS,
                          RU, SC, SD, SE,
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                      TZ,
                         UA, UG, US, UZ,
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                     LT,
                         LU, LV,
                     CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
             BJ, CF,
                     KE, LS,
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             GH, GM,
             BY, KG, KZ, MD, RU, T.I, TM
PRA1 JP 2006-291374
                           Α
                                  20061026
     IP 2006-329436
                            ٨
                                  20061206
     MARPAT 148:509925
08
G1
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ANSWER 1 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN

14

- AB A therapeutic agent for irritable bowel syndrome which contains as an active ingredient a compound having adenosine uptake inhibitory activity; and a therapeutic agent for irritable bowel syndrome which contains as an active ingredient either a tricyclic compound represented by the formula (I) [wherein L represents NEC(-0)-, etc.; RI represents hydrogen, halogeno, etc.; XI-XZ-X3 represents S-CMF-GRS (wherein RY and R8 are the same or different and each represents hydrogen, halogeno, (un) substituted lower alkyl, etc.), etc.; Y represents CMEXCDZ SCCKEZ etc.; and RZ represents (un) substituted lower alkyl, (un) substituted lower alkozy, (un) substituted are alked and activity); SPN (Synthetic preparation); TMU RL: FAC (Pharmacological activity); SPN (Synthetic preparation); TMU REPRESENTED ACTION (PRESENTED ACTION CONTINUED CONTINUED ACTION CONTINUED
 - RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
- (tricylic compds, as the rapeutic agents for irritable bowel syndrome) $\rm RN = 214763{\text -}95{\text -}8$ CAPLUS
- Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-c][1]benzothiepin-9-y1)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX

214764-26-8 CAPLUS

Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry, Rotation (+).

214764-30-4 214764-36-0 214764-38-2 1022178-87-5

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tricylic compds. as therapeutic agents for irritable bowel syndrome)

214764-30-4 CAPLUS RN

Propanamide, N-(4, 10-dihydro-6-methyl-5, 5-dioxido-10-oxothieno[3, 2c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX

214764-36-0 CAPLUS

Propanamide, N-(6-chloro-4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)

- RN

- $\begin{array}{lll} 1022178-87-5 & CAPLIS \\ Propanamide & , & \text{-(6-bromo-4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- & (CA INDEX CAPLES) & (CAPLES) & (CAPL$ NAME)

RE. CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
14
     ANSWER 2 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
     2006:116598 CAPLUS
AN
DN
     144:212756
     Process for preparing tricyclic sulfone
     Imai, Eiichiro; Mimura, Yukiteru; Koizumi, Noriko; Kato, Sachiko;
     Kinugawa, Masahiko; Sugaya, Toru
     Kyowa Hakko Kogyo Co., Ltd., Japan
SO
     PCT lnt. Appl., 15 pp.
     CODEN: PIXXD2
LA
     Japanese
FAN. CNT 1
     PATENT NO.
                           KIND
                                  DATE
                                               APPLICATION NO.
                                                                        DATE
P1
                                               W0 2005-JP14409
                                                                        20050805
     W0 2006013965
                            A1
                                  20060209
         W: AE, AG, AL,
                          AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
              GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
              LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
              NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
              SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
              ZA, ZM,
                      ZW
         RW: AT, BE,
                     BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
              1S, IT,
                     LT,
                      CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             CF, CG,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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20040806

KG, KZ, MD, RU, TJ, TM

Α

PRA1 IP 2004-231392

OS G1 MARPAT 144:212756

formula I wherein X represents hydrogen, halogeno, (un)substituted alkyl, mono((un)substituted alkyl) aminocarbonyl, di ((un)substituted alkyl) aminocarbonyl, or (un)substituted alkanoylamino; A = SO2], comprises oxidizing a tricyclic sulfide represented by the formula I (X = as defined above; A = S) with potassium hydrogen monopersulfate composite salt (2KHSO6 KHSO4 K2SO4). Tricyclic sulfones are pharmaceuticals or intermediates thereof. Thus, oxidation of (S)-(+)-9-(3, 3)-trifluoro-2-hydroxy-2-methylpropanoylamino)-4, 10-dihydrothieno(3, 2-C)[1] benzothiepin-10-one in DMF and water containing Oxone at 35° Cfor 5 h gave (S)-(+)-5,5-dioxo-9-(3, 3)-trifluoro-2-hydroxy-2-methylpropanoylamino)-4, 10-dihydrothieno(3, 2-C)[1] benzothienin-10-one in

The title process for producing a tricyclic sulfone represented by the

95% yield, vs. 65% yield in the prior art. 11 214764-26-89 RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP

(Preparation) (process for preparing tricyclic sulfone by oxidizing tricyclic sulfide with 0xone)

RN 214764-26-8 CAPLUS

N Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-c][1]benzothiepin-9-y1)-3,3,3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

- IT 214763-95-8P
 - RL: SPN (Synthetic preparation); PREP (Preparation) (process for preparing tricyclic sulfone by oxidizing tricyclic sulfide with Oxone)
- RN
- 214763-95-8 CAPLIS
 Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT RE, CNT 7

- 14 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
- 2005:540584 CAPLUS AN
- DN 143:83428
- ΤI Preparation of microcrystals of dihydrothienobenzothiepinylpropanamide derivative
- Izawa, Naoto; Satoh, Norie; Yagi, Nobuhiro; Ohuchi, Kazue; Narita, Shoichi; Aoki, Noboru
- Kyowa Hakko Kogyo Co., Ltd., Japan
- PCT Int, Appl., 20 pp. S0 CODEN: PIXXD2
- Patent
- LA Japanese FAN. CNT 1

1 zuv.	PA'	TÊNT .	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
PΙ	WO	2005	0565	61		Α1		2005	0623		WO 2	004	JP18	773		2	0041	209
		W:						AU,										
								DE,										
								ID,										
								LV,										
								PL,										
		There a						TZ,										
		KW:	BW,					MW,										
								RU,										
								GR,										
								BF,	вJ,	CF,	CG,	CI,	Cai,	GΛ,	GN,	GQ,	GW,	ML,
	ATT	2004				TD,		2005	nenn		AII O	004	2071	99		0	0041	200
		2550		02		A1		2005	0623		CA 2							
		1693				A1		2006	0823		EP 2							
		1693				B1		2008			LI Z	001	0011	02		- 4	OUTI	203
	Li	R:						ES,			GR	TT	1.1	111	NI	SF	MC	PT
								CY,									mo,	
	CN	1845	927	01,	2,1,	Ā	,	2006									0041	209
	AT	4113	20			T		2008			AT 2							
	ES	2314	484			Т3		2009	0316		ES 2							
	KR	$\begin{array}{c} 1845 \\ 4113 \\ 2314 \\ 2006 \end{array}$	1211	63		A		2006	1128		KR 2	006-	7113	72		2	0060	609
	US	2007	0049	634		A1		2007	0301		US 2	006-	5823	28		2	0060	609
	NO.	2006	0031	34		A		2006	0908		NO 2	006-	3134			2	0060	706
PRA:	I JP	2003	-413	725		A		2003	1211									

20041209 No 2004 Jilota mirrocrystals of (%)-(+)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-N-(5, 5, 10-trioxo-4, 10-dihydrothieno[3, 2-c][[]benzothiepin-9-yl]propanamide (1) with average particle diameter of ≤ 80 mg. I is a known

W

- therapeutic agent for urinary incontinence. Crystals of I were pulverized by a jet mill at 0.4 MPa to give microcrystals of I with average particle diameter of 5 µm. Microcrystals of I showed high oral bioavailability and high stability. Capsules containing microcrystals of I were prepared 214764-26-8
- RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(preparation of microcrystals of dihydrothienobenzothiepinylpropanamide derivative with high bioavailability and high stability)

214764-26-8 CAPLUS RN

WO 2004-TP18773

Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2cl[1]benzothiepin-9-vl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RE. CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
14
   ANSWER 4 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
     2005:120727 CAPLUS
AN
DN
     142:212362
     Thienobenzothiepine derivatives as preventive and/or therapeutic agents
     for bronchial asthma
     Ikemura, Toshihide; Karasawa, Akira; Ohmori, Kenji
PA
     Kyowa Hakko Kogyo Co., Ltd., Japan
SO
     PCT lnt. Appl., 34 pp.
     CODEN: PIXXD2
DT
    Patent
     Japanese
I A
FAN. CNT 1
P
```

	PATENT NO.					KIND		DATE		APPLICATION NO.						DATE			
91	W0 2005011674							20050210			WO 2004-JP11571							0805	
		W:	AE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
			CN.	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
			TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
			AZ,	BY,	KG,	KZ,	MD,	RU,	T.I.	TM.	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
			EE,	ES,	FI,	FR,	GB,	GR,	ΗŬ,	IE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
			S1,	SK,	TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	
			SN.	TD,	TG														
m. 1	I TO GOOD DOFFEE					0000	OOOE												

PRA1 JP 2003-205957 Α 20030805 MARPAT 142:212362

G1

Preventive and/or therapeutic agents (for bronchial asthma) and tachykinin inhibitors contain I [R1 is hydrogen, halogeno, substituted or unsubstituted lower alkyl, or substituted or unsubstituted lower alkoxy; X1-X2-X3 is CR5=CR6-CR7-CR8 (wherein R5, R6, R7 and R8 are each independently hydrogen, substituted or unsubstituted lower alkyl, or the like) or the like; Y is CH2S, CH2SO, CH2SO2, CH2O, etc.; and R2 is hydrogen, substituted or unsubstituted lower alkyl, or the like] or pharmacol. acceptable salts thereof as active ingredients. The bioactivity of (S)-(+)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-N-(5, 5, 10-trioxo-4, 10-dihydrothieno[3, 2-c][1]benzothiepin-9-yl)propanamide (II) was demonstrated. An injectable composition contains II 2 mg, D-mannitol 10 mg, HCl (appropriate amount), aqueous NaOH solution (appropriate amount), distilled water (appropriate amount). 214764-26-8 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(thienobenzothiepine derivs, as tachykinin inhibitors or preventive and/or therapeutic agents for bronchial asthma)

214764-26-8 CAPLUS

Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

RE, CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
14
   ANSWER 5 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
```

2005:76260 CAPLUS AN

DN 142:162637

ΤI Medicinal compositions containing 3, 3, 3-trifluoro-2-hydroxy-2-methyl-N-(5, 5, 10-trioxo-4, 10-dihydrothieno[3, 2-c][1]benzothiepin-9-yI)propanamide and al-adrenoceptor blocker

Yamagata, Tsuyoshi; Shirakura, Shiro

PA Kyowa Hakko Kogyo Co., Ltd., Japan

PCT Int. Appl., 36 pp. S0

CODEN: PIXXD2 Patent

LA Japanese

FAN.		TENT .	NO.			KIN	KIND		DATE		APPL		DATE					
PΙ	WO	2005007155				A1		20050127			W0 2004-JP10533					20040716		
		₩:						ΑU,										
								DE,										
								ID,										
								LV,										
								PL,										
								TZ,										
		RW:						MW,										
								RU,										
								GR,										
						BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,
				TD,														
		2532						2005										
	EP	1649															0040	
		R:						ES,							NL,	SE,	MC,	PT,
								TR,										
		2006									US 2	005-	5626	34		2	0051	229
PRAI		2003																
	WO	2004	-JP1	0533		W		2004	0716									
AB	Ιt	is i	nten	ded	to p	rovi	de a	ı med	icin	al c	ompo	siti	on u	sefu	l in	tre	atin	g, fe
	exa	ample	, bl					sympt										

nt which comprises 3, 3, 3-trifluoro-2-hydroxy-2-methyl-N-(5, 5, 10-trioxo-4, 10dihydrothieno[3, 2-c] [1] benzothiepin-9-yl) propanamide or a pharmacol. acceptable salt thereof and an al adrenaline receptor blocker. The effect of combination of (S)-(+)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-N-(5, 5, 10-trioxo-4, 10-dihydrothieno[3, 2-c][1]benzothiepin-9-yl)propanamide and tamsulosin on bladder contraction in bladder hypertrophy rats was examined

214764-26-8

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(medicinal compns. containing 3, 3, 3-trifluoro-2-hydroxy-2-methyl-N-(5, 5, 10-trioxo-4, 10-dihydrothieno[3, 2-c][1]benzothiepin-9-yI)propanamide and al-adrenoceptor blocker)

214764-26-8 CAPLUS Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-[1] benzothiepin-9-vl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 214763-95-8 827629-18-5

RL: TIU (Therapeutic use); BIOL (Biological study); USES (Uses) (medicinal compus, containing 3, 3-trifluoro-2-hydroxy-2-methyl-N-(5, 5, 10trioxo-4, 10-dihydrothieno[3, 2-c][1]benzothiepin-9-yl)propanamide and al-adrenoceptor blocket.

RN 214763-95-8 CAPLUS

CN Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-c][1]benzothiepin-9-yl)-3,3,3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAMF)

RN 827629-18-5 CAPLUS

N Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-c][l]benzothiepin-9-yl)-3,3-trifluoro-2-hydroxy-2-methyl-, (2S)-, mixt. with 5-[2R)-2-[12-c]ethoxyphenxye)ethylamino]propyl]-2-methoxybenzenesulfonamide monohydrochloride (9CI) (CA INDEX NAME)

CM

CRN 214764-26-8 CMF C16 H12 F3 N 05 S2

Absolute stereochemistry. Rotation (+).

- CRN 106463-17-6 CMF C20 H28 N2 05 S . C1 H

Absolute stereochemistry. Rotation (-).

HC1

RE, CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- 14 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
- 2005:76259 CAPLUS AN
- DN 142:170135
- Dihydrothieno[3, 2-c][1]benzothiepin-9-ylpropanamide or derivative thereof as preventive and/or therapeutic agent for pain
- Shirai, Tomomi; Ichikawa, Shunji; Shirakura, Shiro
- PA Kyowa Hakko Kogyo Co., Ltd., Japan
- SO PCT Int. Appl., 35 pp. CODEN: PIXXD2
- DT Patent.
- LA Japanese FAN. CNT 1

	PATENT NO.							KIND DATE				ICAT	DATE					
PΙ			007154			A1		20050127			WO 2004-JP10523							
		W:	AE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
			TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HÙ,	IE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
			SI,	SK,	TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
			SN	TD	TG													

PRAI JP 2003-197694 20030716 Α

- MARPAT 142:170135
- Claimed is a preventive and/or therapeutic agent for pain containing dihydrothieno 3,2-c 1 benzothiepin-9-vlpropanamide or derivative thereof
 - (Markush structure given) as an active ingredient. (S)-(+)-3, 3, 3-Trifluoro-2-hydroxy-2-methyl-N-(5, 5, 10-trioxo-4, 10-
 - dihydrothieno[3, 2-c][1]benzothiepin-9-yl)propanamide (I) showed oral
 - analgesic ED50 of 33.1 mg/kg in a mouse test. A formulation for injection contained I 2 mg, D-mannitol 10 mg, HCl (appropriate amount), aqueous NaOH solution
- (appropriate amount), and distilled water to 2 mL. 214764-26-8
- RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (dihydrothieno[3, 2-c][1]benzothiepin-9-ylpropanamide or derivative thereof as preventive and/or therapeutic agent for pain)
- 214764-26-8 CAPLUS
- Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2
 - c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RE. CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
14
     ANSWER 7 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
AN
     2005:71091 CAPLUS
DN
     142:162623
     Medicinal compositions containing tricyclic heterocyclic compound and
     anticholinergic agent
     Yamagata, Tsuyoshi; Shirakura, Shiro
PA
     Kyowa Hakko Kogyo Co., Ltd., Japan
S0
     PCT Int. Appl., 31 pp.
     CODEN: PIXXD2
DT
LA
     Japanese
FAN. CNT 1
     PATENT NO.
                          KIND
                                 DATE
                                              APPLICATION NO.
                                                                      DATE
PΤ
     W0 2005007191
                                              W0 2004-JP10521
                                                                      20040716
                           A1
                                 20050127
         W: AE, AG, AL,
                         AM, AT, AU, AZ,
                                          BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK,
                                          DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU,
                                  LV, MA,
                                          MD, MG, MK, MN,
                                                           MW, MX,
                                                                    MZ, NA, NI,
                                  PL, PT,
             NO, NZ, OM, PG, PH,
                                          RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN,
                         TR, TT,
                                          UG, US, UZ, VC,
                                                           VN, YU, ZA, ZM, ZW
                                  TZ, UA,
         RW: BW, GH,
                     GM, KE,
                             LS,
                                  MW, MZ,
                                          NA, SD, SL, SZ, TZ, UG,
                                                                   ZM, ZW, AM,
                BY,
                     KG, KZ,
                         KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT,
                                                                        DE, DK,
             EE, ES,
                     FI.
                                                                       RO, SE.
                     TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SI, SK,
             SN, TD, TG
     CA 2532805
                                 20050127
                                              CA 2004-2532805
                                                                      20040716
                           A1
     EP 1652532
                           A1
                                 20060503
                                              EP 2004-747885
                                                                      20040716
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
     US 20060160887
                          A1
                                 20060720
                                              US 2005-562635
                                                                      20051229
PRAI IP 2003-197662
                                 20030716
                           W
     W0 2004-JP10521
                                 20040716
AB
    It is intended to provide a medicinal composition useful in treating, for
     example, hyperactive bladder which comprises
     3, 3, 3-trifluoro-2-hydroxy-2-methyl-N-(5, 5, 10-trioxo-4, 10-dihydrothieno[3, 2-
     c][1]benzothiepin-9-yl)propanamide or a pharmacol, acceptable salt thereof
     and an anticholine drug. The effect of combination of
     (S)-(+)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-N-(5, 5, 10-trioxo-4, 10-
     dihydrothieno[3, 2-c] [1]benzothiepin-9-yl)propanamide 0,01 and tolterodine
     3 mg/kg on bladder contraction in spinal cord injury rats was examined
     214764-26-8
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (medicinal compns, containing tricyclic heterocyclic compound and
        anticholinergic agent)
     214764-26-8 CAPLUS
     Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-
```

c][1]benzothiepin-9-yl)-3, 3, 3-trifIuoro-2-hydroxy-2-methyI-, (2S)- (CA

Absolute stereochemistry, Rotation (+),

INDEX NAME)

- IT 214763-95-8 827629-16-3 827629-17-4
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (medicinal compus. containing tricyclic heterocyclic compound and anticholinergic agent)
- RN 214763-95-8 CAPLUS
 - N Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-c][1]benzothiepin-9-yl)-3,3,3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)

- RN 827629-16-3 CAPLUS
- CN Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-c][1]benzothiepin-9-yl)-3,3-trifluoro-2-hydroxy-2-methyl-, (2S)-, mixt, with 2-[(1R)-3-[bis(1-methylethyl)amino]-1-phenylpropyl]-4-methylphenol (2R,38)-2,3-dihydroxybutanedioate (1:1) (salt) (SCI) (CA INDEX NAME)
 - CM 1
 - CRN 214764-26-8 CMF C16 H12 F3 N 05 S2

Absolute stereochemistry, Rotation (+).

- CM :
- CRN 124937-52-6 CMF C22 H31 N O . C4 H6 06
 - CM
 - CRN 124937-51-5 CMF C22 H31 N 0

Absolute stereochemistry.

CM 4

CRN 87-69-4 CMF C4 H6 06

Absolute stereochemistry.

RN 827629-17-4 CAPLUS

Benzeneaetic acid, a-cyclohexyl-a-hydroxy-,
4-(diethylamino)-2-butynyl ester, hydrochloride, mixt, with
(28)-N-(1,0-dihydro-5,-dioxido-10-oxothieno[3,2-e][I]benzothiepin-9-yl)3, 3, 3-trifluoro-2-hydroxy-2-methylpropanamide (9CI) (CA INDEX NAME)

CM 1

CRN 214764-26-8 CMF C16 H12 F3 N 05 S2

Absolute stereochemistry. Rotation (+).

CM 2

CRN 1508-65-2 CMF C22 H31 N 03 . C1 H

$$\begin{array}{c|c} & \text{HO} & 0 \\ & \text{C-C-O-CH}_2\text{-C} = \text{C-CH}_2\text{-NEt}_2 \\ & \text{Ph} \end{array}$$

● HC1

RE. CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- 14 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
- 2005:14208 CAPLUS AN
- DN 142:120499
- Therapeutic agents for overactive bladder accompanying cerebrovascular disorder
- Atsuki, Kaoru; Shirakura, Shiro
- PA Kyowa Hakko Kogyo Co., Ltd., Japan
- SO PCT Int. Appl., 29 pp.
- CODEN: PIXXD2 DT Patent

FAN.	CNT	anes 1 TENT				KIN	D	DATE			APPL	ICAT	ION :	NO.		-	ATE	
PΙ	WO	2005	0002	93		A1		2005			WO 2				D.U.	2	0040	625
		W:	AE,		AL,	AM,		ΑU,							BY,		CA,	
			CN,	CO,		CU,	CZ,		DK,			EC,	EE,			FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,			IN,		JP,	KE,	KG,	KP,	KR,	KZ,	LC,
			LK,	LR,	LS,	LT,		LV,	MA,			MK,	MN,	MW,	MX,	ΜZ,	NΛ,	NI,
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,		SC,	SD,		SG,	SK,	SL,	SY,
			TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			AZ,	BY,	KG,	KZ,	MD,	RU,	T.J.	TM.	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE.	ES,	FI,	FR,	GB,	GR,	HÜ,	IE,	IT,	LU.	MC,	NL,	PL,	PT,	RO,	SE,
			SI.	SK.	TR.	BF.	BJ,					GA.				ML.	MR.	NE.
			SN.	TD,	TG				,	,	,	,	,		_ ′			,
PRAI OS		2003 RPAT	-185	476		Α		2003	0627									
GI				1001														

ΤT

- This invention pertains to a therapeutic agent for overactive bladder accompanying cerebrovascular disorders which contains I [wherein R1 = H, halo, (un) substituted alkyl, or alkoxy; R2 = H, NH2, (un) substituted alkyl, etc.; X1-X2-X3 = (un)substituted CH-CH-CH-CH, N(0)m-CH-CH-CH. CH=CH-O, etc.; m = 0 or 1; Y = CH2S, CH2O, CH=CH, etc.] or pharmaceutically acceptable salts thereof as an active ingredient. For example, compound II was used for the test, and showed pos. results. 214764-26-8P
- RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; therapeutic agents for overactive bladder accompanying cerebrovascular disorder)

- 214764-26-8 CAPLUS
- Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2c [1]benzothiepin-9-yI)-3, 3, 3-trifIuoro-2-hydroxy-2-methyI-, (2S)- (CA INDEX NAME)

Absolute stereochemistry, Rotation (+),

RE. CNT $\,$ 18 $\,$ THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 9 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
AN
     2004:857378 CAPLUS
DN
     141:325736
     Antitussives
     Miki, Ichiro; Ishii, Hidee
PA
     Kyowa Hakko Kogyo Co., Ltd., Japan
S<sub>0</sub>
     PCT Int. Appl., 30 pp.
     CODEN: PIXXD2
     Patent
     Japanese
FAN, CNT 1
                           KIND
     PATENT NO.
                                   DATE
                                                APPLICATION NO.
                                                                          DATE
PΤ
     WO 2004087131
                            \Lambda 1
                                   20041014
                                                W0 2004-IP4578
                                                                          20040331
                           AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
         W: AE, AG, AL,
              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
              GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
              LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
              NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
                                                                        SK, SL, SY,
              T.J., TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
              BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
              TD, TG
                                                CA 2004-2520680
     CA 2520680
                                   20041014
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     EP 1611888
                                   20060104
                                                EP 2004-724713
                                                                          20040331
                            A1
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
                            ΑÌ
                                                US 2005-549932
     US 20060205756
                                   20060914
                                                                          20050920
PRAI JP 2003-94506
                             Α
                                   20030331
     WO 2004-JP4578
                            W
                                   20040331
     MARPAT 141:325736
AB
     Claimed are antitussives containing thienobenzothiepine derivs, and analogs
     (Markush structure given) as active ingredients. Thus, the antitussive
     activity of 2-hydroxy-2-methyl-N-(5, 5, 10-trioxo-4, 10-dihydrothieno[3, 2-
     c] [1]benzothiepin-9-yl)propanamide was demonstrated. Formulations are
     214764-26-8
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
         (antitussive activity of thienobenzothiepine derivs.)
     214764-26-8 CAPLUS
     Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-
        [1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA
```

Absolute stereochemistry, Rotation (+).

INDEX NAME)

14

RE. CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2004:816279 CAPLUS
- DN 142:168588
- TI Potassium channel subtypes as molecular targets for overactive bladder and other urological disorders
- AU Gopalakrishnan, Murali; Shieh, Char-Chang
- S Neuroscience Research, Global Pharmaceutical Research and Development,
- Abbott Laboratories, Abbott Park, IL, 60064, USA
- SO Expert Opinion on Therapeutic Targets (2004), 8(5), 437-458 CODEN: EOTTAO; ISSN: 1472-8222
- PB Ashlev Publications Ltd.
- DT Journal; General Review
- LA English
- Are Newlew. Potassium channels have re-emerged as attractive targets for overactive bladder and other urol. diseases in recent years, in part due to an enhanced understanding of their mol. heterogeneity, tissue distribution, functional roles and regulation in physici, and pathol. states. Cloning and heterologous expression anal., coupled with the advancement of improved high-throughput screening techniques, have enabled expeditious identification of selective small-mol. openers and blockers for ATP-sensitive K-channels, Ca2-activated K-channels and voltage-dependent K-channel K-CaT-like subfamily (KCM) members, and has paved the way in the assessment of efficacy and adverse effects in preclin models. This review focuses on the rationale for mol. targeting of K-channels, the current status of target validation, including preclin proof-of-concept studies, and provides perspectives on the
- preclin. proof-of-concept studies, and provides perspectives on the limitations and hurdles to be overcome in realizing the potential of these targets for diverse urol. indications such as overactive bladder, erectile dysfunction and prostate diseases. IT 214764-26-8, KW-7158

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); PKT (Pharmacologicals; THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(KW-7158 is efficacious in suppressing spontaneous bladder activity by

(KW-7158 is efficacious in suppressing spontaneous bladder activity by inhibiting afferent pathways and possibly opening A-type K+ channel and remains promising approach for further evaluation)

RN 214764-26-8 CAPLUS

CN Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-c][1]benzothiepin-9-y1)-3,3,3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry, Rotation (+),

RE. CNT 216 THERE ARE 216 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- 14 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
- 2004:547018 CAPLUS AN
- DN 141:64955 KW-7158 [(2S)-(+)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-N-(5, 5, 10-trioxo-4, 10dihydrothieno[3, 2-c][1]benzothiepin-9-yl)propanamide] enhances A-type K+ currents in neurons of the dorsal root ganglion of the adult rat
- AU Sculptoreanu, Adrian; Yoshimura, Naoki; De Groat, William C. Department of Pharmacology, School of Medicine, University of Pittsburgh,
- Pittsburgh, PA, USA SO Journal of Pharmacology and Experimental Therapeutics (2004), 310(1), 159-168
 - CODEN: JPETAB; ISSN: 0022-3565
- PB American Society for Pharmacology and Experimental Therapeutics
- DT Journal LA English

AB Recent studies revealed that a new compound, KW-7158

(2S)-(+)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-N-(5, 5, 10-trioxo-4, 10dihydrothieno[3,2-c][1]benzothiepin-9-v1)propanamide], can depress the excitability of afferent pathways from the urinary bladder and reduce bladder overactivity induced by chemical irritation of the urinary tract with xylene, an agent that sensitizes capsaicin-sensitive, C-fiber afferent nerves. In the present expts., we examined the mechanisms that might underlie the depressant effect of KW-7158 on primary afferent neurons by studying the actions of the compound on ion channels and firing in dissociated dorsal root ganglion (DRG) cells from adult rats using whole cell patch-clamp techniques. KW-7158 increased transient, A-type K+ currents at concns, ranging from 50 nM to 1 µM (20-50% increases). Similar effects were seen in fast blue identified bladder afferent neurons. Low concns. of KW-7158 shortened the action potential duration, produced a 5to 10-mV hyperpolarization, and inhibited repetitive firing induced by either 4-AP (50 µM) or substance P (0.5 µM) in phasic firing DRG neurons. Above 1 µM, KW-7158 elicited a smaller enhancement of A-type K+ currents and in high concns, inhibited the currents, Tetraethylammonium (5-60 mM) and verapamil (50 μM), which block noninactivating K+ currents, did not prevent the facilitatory effects of KW-7158. High concns. of 4-AP (5 mM) inhibited A-type K+ currents and prevented the facilitatory effect of KW-7158 on the remaining currents, These data suggest that KW-7158 enhances A-type K+ currents in DRG neurons. Because A-type K+ channels regulate afferent neuron excitability and firing properties, KW-7158 is a promising new compound for treatment of hyper-reflexic bladder conditions.

214764-26-8, KW-7158

RL: PAC (Pharmacological activity); BIOL (Biological study) (KW-7158 enhances A-type potassium currents in neurons of dorsal root ganglion of adult rat)

214764-26-8 CAPLUS RN

Propagamide, N=(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-[1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry, Rotation (+),

ALL CITATIONS AVAILABLE IN THE RE FORMAT

US 2004-495366

20040512

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DN
     138:379274
     Preventive or remedy for pruritus
     Hayashi, Ken-ichi; Ichikawa, Shunji; Karasawa, Akira
PA
     Kyowa Hakko Kogyo Co., Ltd., Japan
S0
     PCT Int. Appl., 33 pp.
     CODEN: PIXXD2
     Patent
     Japanese
FAN, CNT 1
     PATENT NO.
                          KIND
                                 DATE
                                              APPLICATION NO.
                                                                      DATE
PΙ
     W0 2003041704
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                                              W0 2002-JP11830
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             GM, HR, HU, ID, IL, IN, IS,
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             LT, LU, LV, MA, MD, MG, MK,
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             PT, RO, RU,
                                  SE, SG,
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                                                                    TR, TT, TZ,
                         UZ, VC, VN, YU, ZA, ZM, ZW
             UA, UG, US,
         RW: GH, GM, KE,
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                                              JP 2003-543591
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20041209

20011113

20021113

ANSWER 12 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN

US 20040248926

WO 2002-JP11830

MARPAT 138:379274

PRAI IP 2001-347253

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14

AN

2003:396713 CAPLUS

AB A pruritus preventive or remedy which contains as an active ingredient either a tricyclic compound represented by the following formula (1): I wherein RI is hydrogen, (un) substituted lower alkyl, (un) substituted lower alkyl, (un) substituted lower alkyl, (un) substituted lower alkyl, (un) substituted contains the contained by the contained

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tricyclic compds. as preventives or remedies for pruritus) 214764-26-8 CAPLUS

RN 214/04-20-8 CAPLLS CAPLLS (CPL) (CAPLES CAPLES CAPLES (CAPLES CAPLES CAPLES CAPLES CAPLES CAPLES CAPLES (CAPLES CAPLES CAPLES

Absolute stereochemistry, Rotation (+).

RE. CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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14
     ANSWER 13 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
AN
     2002:777737 CAPLUS
DN
     Remedies for vesical stimulation in association with prostatauxe
IN
     Yamagata, Tsuyoshi; Atsuki, Kaoru; Ohno, Tetsuji; Shirakura, Shiro;
     Karasawa, Akira
     Kyowa Hakko Kogyo Co., Ltd., Japan
     PCT Int. Appl., 35 pp.
     CODEN: PIXXD2
     Japanese
FAN. CNT 1
     PATENT NO.
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                                  DATE
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     WO 2002078712
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              GM, HR, HU, ID, IL, IN, IS,
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             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
             PT, RO, RU,
                          SD, SE, SG, SI,
                                           SK, SL, TJ, TM, TN, TR,
                                                                     TT, TZ, UA,
             UG, US, UZ,
                          VN,
                              YU, ZA, ZM,
                                            ZW
         RW: GH, GM, KE,
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                              MW, MZ, SD,
                                           SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, GR, IE, IT, LU, MC, NL, PT, SE, TR, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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                                  20040114
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PRAI IP 2001-99799
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                                  20010330
     WO 2002-JP3169
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0S
     MARPAT 137:289045
GT
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AB Remedies for vesical stimulation in association with prostatauxe which contain as the active ingredient trievelic compds, represented by the following general formula I (R1 = H, optionally substituted lower alkyl, etc.; X1-N2-N3 = CRS-GRE-CRY-CRS, CRS-CRS-CRS - etc.; Y = -CRS-S, SOCH2, etc.; and R2 = H, etc.) or pharmacol. acceptable salts thereof.

11 24469-26-8 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (remedies for vesical stimulation in association with prostatauxe) RN 24469-26-8 CAPLIS CN Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-e][1]benzothiepin-9-yl)-3,3,3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RE, CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
14
     ANSWER 14 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
AN
     2002:777736 CAPLUS
DN
     Remedies for vesical hyperesthesia
IN
     Yamagata, Tsuyoshi; Atsuki, Kaoru; Ohno, Tetsuji; Shirakura, Shiro;
     Karasawa, Akira
PA
     Kyowa Hakko Kogyo Co., Ltd., Japan
     PCT Int. Appl., 30 pp.
     CODEN: PIXXD2
     Japanese
FAN. CNT 1
     PATENT NO.
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                                   DATE
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P1
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     W0 2002078711
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              LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
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                                            SK, SL, TJ, TM, TN, TR,
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              UG, US, UZ,
                          VN,
                               YU, ZA, ZM,
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     EP 1384481
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     MARPAT 137:289044
0S
G1
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AB Remedies for vesical hyperesthesia which contain as the active ingredient tricyclic compds. represented by the following general formula I (RI = H, optionally substituted lower alkyl, etc.; XI-X2-X3 = CR5-CR6-CR7-CR8, CR5-CR6-C, etc.; Y = -CR2S-, SOCH2, etc.; and R2 = H, etc.) or pharmacol. acceptable salts thereof.

1 21476-26-8

RI: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (remedies for vesical hyperesthesia)

RV 244764-26-8 CAPLIS

CN Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-c][]benzothiepin-9-yl)-3,3,3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry, Rotation (+).

RE. CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
14
     ANSWER 15 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
AN
     2002:777735 CAPLUS
DN
     137:289043
     Remedies for vesical hyperactivity
IN
     Yamagata, Tsuyoshi; Atsuki, Kaoru; Ohno, Tetsuji; Shirakura, Shiro;
     Karasawa, Akira
     Kyowa Hakko Kogyo Co., Ltd., Japan
     PCT Int. Appl., 37 pp.
     CODEN: PIXXD2
     Japanese
FAN. CNT 1
     PATENT NO.
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                                   DATE
                                               APPLICATION NO.
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     W0 2002078710
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              GM, HR, HU, ID, IL, IN, IS,
                                            JP, KE, KG, KR, KZ, LC, LK, LR, LS,
              LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
              PT, RO, RU.
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                                                                      TT, TZ, UA,
              UG, US, UZ,
                          VN.
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PRA1 JP 2001-99801
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     WO 2002-JP3167
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G1
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AB Remedies for vesical hyperactivity which contain as the active ingredient tricyclic compds, represented by the following general formula I (RI = H, optionally substituted lower alkyl, etc.; X1 - X2 - X3 = CR5-CR6-CR7-CR8, CR5-CR6-CR - ctc.; Y = -CR2-S, SOCH2, etc.; and R2 = H, etc.) or pharmacol. acceptable salts thereof.

IT 214764-26-8 214764-36-0 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (remedies for vesical hyperactivity)

RN 214764-26-8 CAPLUS CN Propagamide N-(4 10-c

N Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-c][1]benzothiepin-9-y1)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 214764-36-0 CAPLUS

Propanamide, N-(6-chloro-4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-c]||benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)

RE. CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2002:777655 CAPLUS
- DN 137:273240
- TI (S)-N-(5,5-dioxido-10-oxo-4, 10-dihydrothieno[3,2-C][1]benzothiepin-9-yl)-3,3,3-trifluoro-2-hydroxy-2-methylpropanamide for the treatment of bladder irritative symptoms accompanied by benign prostatic hyperplasia
- IN Yamagata, Tsuyoshi; Atsuki, Kaoro; Ohno, Tetsuji; Shirakura, Shiro;
- Degroat, William C.; Yoshimura, Naoki; Sculptoreanu, Adrian
- PA Kyowa Hakko Kogyo Co., Ltd., Japan; University of Pittsburgh
- SO PCT Int. Appl., 37 pp.
- DT Patent
- LA English

FAN.	CNT	- 1

P1 W0 2002078833	1 21114	PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BC, BB, BY, BZ, CA, CH, C CO, CR, CL, CZ, DE, DK, DM, DZ, EC, EE, ES, ET, GB, GD, GE, C GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, I LS, LT, LU, LV, MA, MD, MG, MK, MN, MN, MX, MZ, NO, NZ, OM, I PL, PT, RO, RU, SD, SE, GS, SI, SK, SL, TJ, TM, TT, TZ, LU, UG, US, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, F	P1										WO 2	002-	US95	75		2	0020	329
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, RR, KZ, LC, LK, I LS, LT, LU, LV, MA, MD, MG, MK, MN, MN, MX, MZ, NO, NZ, OM, I PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, U G, US, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, F			AE,	AG,	AL,	AM,	AT,	AU,	AZ,									
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, 1 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, U UG, US, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, E																		
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, E										SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,
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KG, KZ, MD, RU, TT, TM, AT, BE, CH, CY, DE, DK, ES, FT, FR, G		RW:																
GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, C												BF,	ВJ,	CF,	CG,	CI,	CM,	GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG		01 0110												450				000
CA 2442452 A1 20021010 CA 2002-2442452 2002032		CA 2442	452			A1		2002	1010		CA 2	002-	2442	452		2	0020	329
AU 2002338234 A1 20021015 AU 2002-338234 2002032																		
EP 1372639 A2 20040102 EP 2002-757832 2002032																		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, I		к:											LI,	LU,	NL,	SE,	MC,	PT,
1E, SI, LT, LV, FI, RO, MK, CY, AL, TR																		
JP 2004529133 T 20040924 JP 2002-576901 2002032																		
ÜS 20040122078 A1 20040624 ÜS 2003-473348 2003093 US 7122173 B2 20061017		US 2004	101220	78		A1					US 2	003-	4733	48		2	0030	930
US 7122173 B2 20061017		US 7122	2173			B2												
US 20060276531 A1 20061207 US 2006-503067 2006081											US 2	006-	5030	67		2	0060	814
PRA1 US 2001-279699P P 20010330	PRA1	. US 2001	2796	399P		P		2001	0330									
W0 2002-US9875 W 20020329 US 2003-473348 A3 20030930		WO 2002	2-US95	575		W		2002	0329									
US 2003-473348 A3 20030930		US 2003	-4733	348		A3		2003	0930									

- AB The invention provides an agent, (S)-(N-(6,5-dioxido-10-oxo-4,10-dihydrothieno(3,2-C)[1]benzothiepin-9-y-1>-3,3-trifluoro-2-hydroxy-2-methylpropanamide) for the treatment of bladder irritative symptoms accompanied by benign prostatic hyperplasia, comprising, as an active ingredient, a compound having a slowly-inactivating A-type K+channel opening activity or a pharmaceutically acceptable salt thereof, and a method for screening agents for the treatment of bladder irritative symptoms accompanied by benign prostatic hyperplasia, comprising measuring a slowly-inactivating A-type K+channel opening activity as an index.
- 1T 214764-26-8
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - ((S)-N-(S, S-dioxido-10-oxo-4, 10-dihydrothieno[3,2-C][1]benzothiepin-9yl)-3,3,2-trifluoro-2-hydroxy-2-methylpropanamide for treatment of bladder irritative symptoms accompanied by benign prostatic hymerblasic
- RN 214764-26-8 CAPLUS
- CN Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2c][1]benzothiepin-9-y1)-3,3,3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry, Rotation (+),

RE. CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2002:547845 CAPLUS
- DN 138:215150
- TI Effect of KW-7158, a putative afferent nerve inhibitor, on bladder and vesico-vascular reflexes in rats
- AU Lu, Shing-Hwa; Yamagata, Tsuyoshi; Atsuki, Kaoru; Sun, Lushen; Smith, Christopher P.; Yoshimura, Naoki; Chancellor, Michael B.; de Groat, William C.
- CS Department of Pharmacology, University of Pittsburgh School of Medicine,
- Pittsburgh, PA, 15261, USA SO Brain Research (2002), 946(1), 72-78 CODEN: BRREAP; ISSN: 0006-8993
- PB Elsevier Science B.V.
- DT Journal
- LA English
- AB The effects of KW-7158, a putative afferent nerve inhibitor, on reflex bladder activity and vesico-vascular reflexes were evaluated in urethane anesthetized SD rats with normal and xylene-irritated bladders. The bladder was filled with saline until the appearance of large amplitude spontaneous bladder contractions (LA-BC). Vesico-vascular reflexes were measured as increases in systolic arterial blood pressure during LA-BC or when the bladder was distended by a range of pressures. In normal rats, KW-7158 (10 and 100 μg/kg, i.v.) did not alter the amplitude or volume threshold for inducing LA-BC but increased the intercontraction interval. After xylene-irritation, which decreased volume threshold and intercontraction interval and induced small amplitude bladder contractions, KW-7158 increased volume threshold (65%) and intercontraction interval (150%) and decreased the number of small amplitude bladder contractions. Vesico-vascular reflexes induced during LA-BC or by bladder distension were suppressed (19.4-100%) by KW-7158. The effect of KW-7158 to depress vesico-vascular reflexes as well as xylene-induced bladder hyperactivity without altering the amplitude of contractions is consistent with the view that the drug affects reflex bladder activity at least in part by depressing afferent pathways.
- IT 214764-26-8, KW 7158
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (effect of KW-7158, a putative afferent nerve inhibitor, on bladder and vesico-vascular reflexes in rats)
- RN 214764-26-8 CAPLUS
 - CN Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-c][1]benzothiepin-9-v1)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA
- c][1]benzothiepin-9-y1)-3, 3, 3-trifluoro-2-hydroxy-2-methy1-, (2S)- (CAINDEX NAME)

Absolute stereochemistry, Rotation (+).

RE. CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2002:129132 CAPLUS
- DN 136:183808
- TI Method for preparation of 9-amino-4,10-dihydrothieno[3,2-c][1]benzothiepin-10-one derivatives via Friedel-Crafts cyclization of 2-(3-thienylmethylthio)benzoic acid derivatives.
- IN Imai, Eiichiro; Mimura, Takashi; Matsushita, Tetsuo; Mori, Shinichiro; Ogasa, Takehiro
- PA Kyowa Hakko Kogyo Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 20 pp. CODEN: JKXXAF
- OT Patent
- LA Tapanese
- LA Japane

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FAN	CNT 1 PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	JP 2002053580	Λ	20020219	JP 2000-241112	20000809
PRA OS	I JP 2000-241112 CASREACT 136:183808:	MARP	20000809 AT 136:183808		

The title compds. [I; X = H, (un) substituted lower alkyl or alkoxy, halo; Y = H, (un)substituted lower alkyl or alkenyl, CF3, (un)substituted lower alkoxy, NH2, (un) substituted mono- or di(lower alkyl) amino, (un)substituted aryl, heteroaryl, aralkyl, arylamino, or alicyclic heterocyclyl, (CH2)nCP1(P2)Q; wherein n = 0,1; P1, P2 = H, (un)substituted lower alkyl, cycloalkyl, aryl, or aralkyl, CF3; or P1 and P2 are combined together to form cycloalkyl; Q = HO, (un) substituted lower alkoxy, NH2, halo are prepared by Friedel-Crafts reaction of 2-(3-thienylmethylthio)benzoic acid derivs. (II; R1 = halo, NO2; X = same as above) or salts thereof for cyclization to give 4,10-dihydrothieno[3,2-c][1]benzothiepin-10-one derivs. (III; R1, X = same as above). This process is industrially suitable and readily gives in high yields the compds. I which are useful as therapeutic agents for urinary incontinence (no data). Thus, chlorination of 3-thiophenemethanol by SOC12 in at room temperature for 1 h in toluene followed washing with 1.27 M aqueous NaOH gave a toluene solution of 3-chloromethylthiophene which was stirred with 2-fluoro-6-mercaptobenzoic acid and aqueous NaOH at 40° for 1 h to give 89% 2-fluoro-6-(3-thienylmethylthio)benzoic acid (IV). A toluene solution of IV was treated dropwise with trifluoroacetic anhydride under ice-cooling and stirred at the same temperature for 1 h and then at 40° for 1 h to give 85% 9-fluoro-4, 10-dihydrothieno[3, 2-c][1]benzothiepin-10one which was heated with benzylamine under stirring at 80° for 6 h

to give 96% 9-benzylamino-4, 10-dihydrothieno [3, 2-c] [1] benzothiepin-10-one (V). An EtOAc solution of V was treated with an EtOAc solution of 2, 3-dichloro-5, 6-dicyano-1, 4-benzoquinone at 40° and stirred at the same temperature for 2 h to give 87% 9-amino-4, 10-dihydrothieno[3, 2c][1]benzothiepin-10-one (VI). A solution of (S)-(+)-3, 3, 3-trifluoro-2-hydroxy-2-methylpropanoic acid was treated with SOC12 at -15° and stirred at -15° to -5° for 1 h, followed by adding VI, and the resulting mixture was stirred at room temperature overnight to give 63% (S)-9-[(3, 3, 3-trifluoro-2-hydroxy-2methylpropanoyl)amino]-4, 10-dihydrothieno[3, 2-c][1]benzothiepin-10-one which was oxidized by m-chloroperbenzoic acid in CH2C12 at room temperature for 3 h to give (S)-5, 5-dioxo-9-[(3, 3, 3-trifluoro-2-hydroxy-2methylpropanoyl)amino]-4, 10-dihydrothieno[3, 2-c][1]benzothiepin-10-one. 214764-26-8P,~(S)-5, 5-Dioxo-9-[(3,3,3-trifluoro-2-hydroxy-2-methylpropanoyl)amino]-4, 10-dihydrothieno[3,2-c][1]benzothiepin-10-oneRL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (method for preparation of 9-aminodihydrothieno[c][1]benzothiepinone derivs, via Friedel-Crafts cyclization of (3-thienylmethylthio)benzoic acid derivs.)

Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-c][1]benzothienin-9-vl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA

INDEX NAME)
Absolute stereochemistry, Rotation (+).

214764-26-8 CAPLUS

- L4 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2001:240151 CAPLUS
- DN 134:261274
- TI Tricyclic compounds for the treatment of pollakiuria and urinary incontinence, pharmaceutical compositions, and preparation thereof
- IN Yoshida, Makoto; Seishi, Takashi; Aono, Shigeru; Yamagata, Tsuyoshi; Atsuki, Kaoru; Kumazawa, Toshiaki; Takai, Haruki; Suzuki, Koji; Karasawa, Akira
- PA Kyowa Hakko Kogyo Co., Ltd., Japan
- SO U.S., 30 pp., Cont.-in-part of PCT Appl. W098JP/01713. CODEN: USXXAM
- DT Patent
- LA English
- FAN, CNT 2

		FENT .	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
PΙ	US	6211	227			B1		2001	0403		US 1	999	4176	26		1	9991	014
	WO	9846	587			A1		1998	1022		WO 1	998-	JP17	13		1	9980	415
		W:	AU,	BG,	BR,	CA,	CN,	CZ,	HU,	IL,	JP,	KR,	MX,	NO,	NZ,	PL,	RO,	SG,
			SI,	SK,	UA,	US,	VN,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM		
		RW:	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,
			PT,	SE														
PRAI	. JP	1997	-972	33		Λ		1997	0415									

PRAI JP 1997-97233 A 19970415 W0 1998-JP1713 A2 19980415 OS MARPAT 134:261274

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$$\begin{array}{c|c} \chi_1 & 0 & \mathbb{R} \\ \chi_2 & 0 & \mathbb{R} \\ \chi_3 & \gamma & \mathbb{R} \\ \end{array}$$

- AB Tricyclic compds. are provided which are useful for the treatment of pollakturia and urinary incontinence and which are represented by I [RI = H, (un) substituted lower alkyl, etc.; X1X2X3 = C(R5):C(R6)C(R7):CR8; (R6-R8 = H, (un) substituted lower alkyl, OH, (un) substituted lower alkoxy, etc.), N(O)m:C(R5)C(R6):C(R7) CR5-R7 as above: m = O, 1), SC(R7):C(R8) (R7, R8 as above), etc.; when R2 is H, (un) substituted lower alkyl, (un) substituted N-substituted lower alkyl, (CH2)nC(Q)(R3) (R4) (n = O, 1; R3, R4 = H, (un) substituted lower alkyl, CF3, etc., or R3 and R4 may be combined to form cyclic alkyl; Q = OH, halogen, etc.), etc.; Y = CH2SOZ, SCH2, SOCH2, SOCH2, etc.] and pharmaceutically acceptable salts thereof.
- IT 214763-95-8P 214764-26-8P 214764-27-9P 214764-29-IP 214764-30-4P 214764-34-8P 214764-36-0P 214764-38-2P 332029-03-5P 332029-03-5P
 - RL: BAC (Biological activity or effector, except adverse): BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study): PREP (Preparation): USES (Uses)
 - (tricyclic compound preparation for treatment of pollakiuria and urinary incontinence)
- RN 214763-95-8 CAPLUS
- CN Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-c][1]benzothiepin-9-yI)-3,3,3-trifIuoro-2-hydroxy-2-methyI-

RN 214764-26-8 CAPLUS

CN Propanamide, N-(4,10-dihydro-5,5-dioxido-10-oxothieno[3,2-c][1]benzothiepin-9-yl)-3,3,3-trifluoro-2-hydroxy-2-methyl-, (28)- (CA INDEX MAME)

Absolute stereochemistry, Rotation (+).

RN 214764-27-9 CAPLUS

CN Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry, Rotation (-).

RN 214764-29-1 CAPLUS

CN Propanamide, N-(4,10-dihydro-6-methoxy-5,5-dioxido-10-oxothieno[3,2c][1]benzothiepin-9-y1)-3,3,3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)

- RN 214764-30-4 CAPLUS
- CN Propanamide, N=(4,10-dihydro-6-methyl-5,5-dioxido-10-oxothieno[3,2-c][]benzothiepin-9-yl)-3,3,3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)

- RN 214764-34-8 CAPLUS
- CN Propanamide, N-(4,10-dihydro-8-methyl-5,5-dioxido-10-oxothieno[3,2-c][1]benzothiepin-9-yl)-3,3,3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)

- F3C-C-C-N
- RN 214764-36-0 CAPLUS
- CP Propanamide, N-(6-chloro-4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)

- RN
- 214764-38-2 CAPLUS
 Propanamide, 3, 3, -trifluoro-N-(6-fluoro-4, 10-dihydro-5, 5-dioxido-10oxothieno[3, 2-e][1]benzothiepin-9-yl)-2-hydroxy-2-methyl- (CA INDEX NAME)

- $332029-02-4 \quad CAPLUS \\ Propanamide, \quad N-(4,10-dihydro-2-nitro-5,5-dioxido-10-oxothieno [3,2-c][1]benzothiepin-9-y1)-3,3,3-trifluoro-2-hydroxy-2-methyl- \qquad (CA INDEX NAME)$

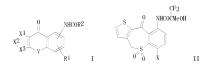
- 332029-03-5 CAPLUS Propanamide, N-(4,10-dihydro-3-nitro-5,5-dioxido-10-oxothieno[3,2e][1]benzothiepin-9-yl)-3,3,3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)

RE. CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- 14 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2009 ACS on STN
- 1998:708807 CAPLUS AN
- DN 129:316211
- OREF 129:64531a, 64534a
- Preparation of tricyclic heterocyclic compounds for the treatment of
- pollakiuria and enuresis
- Yoshida, Makoto; Seishi, Takashi; Aono, Shigeru; Takai, Haruki; Suzuki, Koji; Yamagata, Tsuyoshi; Atsuki, Kaoru; Karasawa, Akira; Kumazawa,
- Kyowa Hakko Kogyo Co., Ltd., Japan
- SO PCT Int. Appl., 70 pp.
- CODEN: PIXXD2
- Patent.

FAN.	CNT	2	

	Japanese CNT 2				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	W0 9846587	A1	19981022	W0 1998-JP1713 IL, JP, KR, MX, NO, NZ,	19980415 PL. RO. SG.
				BY, KG, KZ, MD, RU, T.J.	
		CY, DE	DK, ES, F	FI, FR, GB, GR, IE, IT,	LU, MC, NL,
	PT, SE				
	CA 2286723	A1	19981022	CA 1998-2286723	19980415
	CA 2286723	C	20070130		
	AU 9868515	A	19981111	CA 1998-2286723 AU 1998-68515 EP 1998-914022	19980415
	AU 738757	B2	20010927		
	EP 979821	A1	20000216	EP 1998-914022	19980415
	EP 979821	BI DV	20060913	OD OD TO LE LU ME	CP MG DW
	IE, FI, CY	DE, DK	, ES, FK, C	GB, GR, IT, LI, LU, NL,	SE, MC, PI,
	PD 0000EE9	A	20000523	BR 1998-8552	10020415
	HI 2000002	A9	20010628	HU 2000-2461	19980415
	BR 9808552 HU 2000002461 HU 2000002461	A3	20030128	nc 2000 2101	13300110
	JP 3283267 CN 1260220 AT 339409 ES 2273413	B2	20020520	IP 1998-543737	19980415
	CN 1260220	C	20060621	JP 1998-543737 CN 1998-804964	19980415
	AT 339409	T	20061015	AT 1998-914022	19980415
	ES 2273413	T3	20070501	ES 1998-914022	19980415
	NO 9904960	A	19991209	NO 1999-4960 US 1999-417626	19991012
	US 6211227	B1	20010403	US 1999-417626	19991014
	HK 1025572 JP 1997-97233	A1	20070427	HK 2000-104846	20000802
PRAI	JP 1997-97233	A	19970415		
	W0 1998-JP1713	W	19980415		
0S	MARPAT 129:316211				



Tricyclic compds, of general formula (I) and pharmacol, acceptable salts thereof [wherein R1 is hydrogen, halo, substituted or unsubstituted lower alkyl or alkoxy; X1-X2-X3 is CR5:CR6CR7:CR8 (wherein R5, R6, R7 and R8 are each independently hydrogen, substituted or unsubstituted lower alkyl, hydroxyl, substituted or unsubstituted lower alkoxy or the like), N(0)m:CR5CR6CR7 (wherein R5, R6 and R7 are each the same as defined above; and m is 0 to 1), SCR7:CR8 (wherein R7 and R8 are each the same as defined above) or the like; R2 is hydrogen, substituted or unsubstituted lower

alkyl, substituted or unsubstituted lower alkoxy, a substituted or unsubstituted N-substituted heterocyclic group or a group of general formula (CH2)nC(Q)R3R4; (wherein n is 0 or 1; R3 and R4 are each independently hydrogen, substituted or unsubstituted lower alkyl, trifluoromethyl or the like, or alternatively R3 and R4 may be united to form cyclic alkyl; and Q is hydroxyl, halogeno or the like); and Y is CH2SO2, SCH2, SOCH2, SO2CH2 or the like are prepared Thus, 3, 3, 3-trifluoro-2-hydroxy-2-methylpropanoic acid was stirred with SOC12 in dimethylacetamide at .apprx, -15° to .apprx, 5° for 1 h and the condensed with 9-amino-4, 10-dihydrothieno[3, 2-c][1]benzothiepin-10-one at room temperature overnight followed by oxidation with m-chloroperbenzoic acid in CH2CL2 to give the title compound, 4.10-dihydrothieno(3,2-c][(1)benzothiepin-10-one derivative (II; X = II). II (X = II) and II (X = CI) in vitro inhibited the KCl (15 mmol/L)-induced contraction of rat bladder muscle strips with IC50 of 2.6 and 0.7 MM, resp., and in vivo prolonged the contraction intervals of rat bladder by 203 ± 21 and 148 ± 3%, resp., 5 h after the administration of these compds. 214763-95-8P 214764-26-8P 214764-27-9P 214764-29-1P 214764-30-4P 214764-34-8P 214764-36-0P 214764-38-2P 214764-51-9P

214764-52-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tricyclic heterocyclic compds, for treatment of pollakiuria and enuresis)

214763-95-8 CAPLUS RN

Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2c][1]benzothiepin-9-y1)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-NAME)

214764-26-8 CAPLUS

Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno 3, 2c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

214764-27-9 CAPLUS

Propanamide, N-(4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-

c][1]benzothiepin-9-y1)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry, Rotation (-).

214764-29-1 CAPLUS Propanamide, N-(4,10-dihydro-6-methoxy-5,5-dioxido-10-oxothieno[3,2c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX

214764-30-4 CAPLUS

Propanamide, N-(4,10-dihydro-6-methyl-5,5-dioxido-10-oxothieno[3,2c][1]benzothiepin-9-y1)-3, 3, 3-trifluoro-2-hydroxy-2-methy1- (CA INDEX NAME)

RN 214764-34-8 CAPLUS

Propanamide, N-(4, 10-dihydro-8-methyl-5, 5-dioxido-10-oxothieno[3, 2c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)

- 214764-36-0 CAPLUS
- Propanamide, N-(6-chloro-4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2c][1]benzothiepin-9-v1)-3, 3, 3-trifluoro-2-hydroxy-2-methyl- (CA INDEX NAME)

- 214764-38-2 CAPLUS
- Propanamide, 3, 3, 3-trifluoro-N-(6-fluoro-4, 10-dihydro-5, 5-dioxido-10-oxothieno[3, 2-c][1]benzothiepin-9-yl)-2-hydroxy-2-methyl- (CA INDEX NAME)

$$\begin{array}{c} \text{HO O} \\ \text{F}_{3}\text{C-C-C} \\ \text{Me} \end{array} \\ \text{NH O} \\ \text{S}$$

- 214764-51-9 CAPLUS Propanamide, N-(4,10-dihydro-2-nitro-5,5-dioxido-10-oxothieno[3,2c][1]benzothiepin-9-yl)-3, 3, 3-trifluoro-2-hydroxy-2-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry,

RN 214764-52-0 CAPLUS

CN Propanamide, N-(4,10-dihydro-3-nitro-5,5-dioxido-10-oxothieno[3,2-c][1]benzothiepin-9-yl)-3,3,3-trifluoro-2-hydroxy-2-methyl-, (28)- (CA INDEX NAME)

Absolute stereochemistry.

RE. CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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